FSB Role Description – FSW Development Team Lead (DTL)

Roles & Responsibilities

- Direct technical and leadership responsibility, from both a Project and FSB point of view, for the successful implementation and scheduled delivery of one or more element(s) of mission FSW (e.g., C&DH, GN&C, instrument) by an integrated Civil Servant and contractor FSW team.

- Reports directly to the FSW Product Development Lead. Reports to Spacecraft or Instrument Manager at the discretion of the FSW PDL. Reports to FSB management in conjunction with the PDL.

- Responsible for the FSW systems engineering associated with the FSW architecture, hardware interfaces, ground interfaces and tools for the assigned FSW products.

- Responsible for coordinating with other FSW leads on the required fidelity, quantity and delivery dates of flight-like hardware and simulations for the full set of FSW test environments. Clearly states risks associated with less-than-full-performance fidelity in any area of testbed availability.

- Advocates and implements the FSB standards and guidelines associated with FSW development and test of the assigned FSW products. Coordinates FSW development practices with other FSW Leads to ensure that the processes are being followed and a consistent end-product FSW system is achieved. Recommends improvements to FSB processes. Accommodates 'tailoring' of FSW processes to match Project demands via waivers submitted to the FSB CCB. Tracks waivers as risks when requested.

- Plans the required staff and schedule profiles to accomplish the FSW Development Program. Identifies and tracks schedule dependencies. Tracks test product progress monthly (and sometimes weekly). Reports staff, schedule and cost status at least monthly.

- Develops, in conjunction with other FSW Leads, the mission-specific management and technical plans for FSW development and test. Provides FSW development team contents of the FSW Product Plan and FSW Test Plan.

- Ensures development and test team awareness and implementation of all relevant aspects of the FSW Product Plan and FSW Test Plan.

- Responsible for the development, clarity, completeness and maintenance of the detailed FSW requirements documentation. Ensures that both FSW development and test staff find no vagueness or ambiguity in what is to be developed or tested.

- Ensures rigorous maintenance and controls of all FSW requirements documentation.

- Responsible for the designs, implementations and unit tests developed by each person on the integrated FSW development team.

- Responsible for the FSW build-integration test activities and associated Command and Telemetry database. Responsible for the implementation and quality of FSW product deliveries.

- Responsible for effective and rigorous configuration management and control of all FSW products and tools. Develops CM documentation. Reports and tracks all problems and changes to the FSW, databases, test environments, tools, simulators, requirements, etc.

- Works with the FSW Lab Manager to ensure effective IT Security on all equipment, effective version control of all equipment, software and data files, proper use of equipment logs, property tracking, etc.

- Identifies risk areas, including dependencies, associated with assigned FSW. Recommends risk mitigations. Implements risk mitigations in all areas under his control. Measures, tracks and reports status of each risk.

- Implements risk mitigation in all areas under his control.

- Reports monthly on status of the FSW system, associated FSW elements and each risk – even when Project decisions to accept the risks have been made.

- Supports W Va IV&V as required.

- Provides hardware/software test support during flight data system development, special flight hardware/software tests, and I&T.

- Mentors staff as necessary to ensure quality and productivity. Enables team members to grow in skills and responsibilities such that increased capabilities of staff are evident following their team assignments.

- Provides constructive inputs to branch management regarding the performance contributions of each member of the team. Additionally provides constructive suggestions for improvement and growth. Provides substantive recommended performance plan elements for each staff member on a fiscal year basis. As requested or appropriate, provides similar input to contractor management regarding contractor staff performance on the team.

- Provides recommendations to the FSW Branch Standards CCB regarding desired improvements to approved and draft FSW Branch standards and processes. Identifies the need for new FSW development, test, operations, and maintenance standards and processes.

- Ensures effective and rigorous configuration management and control of all FSW products and tools. Develops CM documentation. Reports and tracks all problems and changes to the FSW, databases, test environments, tools, simulators, requirements, etc.

Ownership and Approval Authority

The FSW Branch Head is the owner of this role description. The FSB Standards CCB has approval authority.

Change History

Version	Date	Change
1.4	06/30/06	DCR #173.
1.3	06/28/04	DCR #76 – change name from Position Description to Role Description.
1.2	01/27/04	DCR #39 - Addition of Requirements Management words. DCR #42 - improved Performance Plan words.
1.1	12/10/03	DCR #30 - addition of performance plan words.
1.0	08/22/03	Initial draft.